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JOURNAL ARTICLE

Testicular secretion of inhibin in the male golden hamster (Mesocricetus auratus)

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To identify the cellular source of inhibin in the male golden hamster, we have used complementary approaches, immunohistochemistry and enzyme-linked immunosorbent assay (ELISA). Strong positive staining of the inhibin alpha subunit was observed in both the Sertoli and Leydig cells of the testes. No specific staining was observed for the inhibin betaA subunit, whereas specific staining for the inhibin betaB subunit was strongly positive in the Leydig cells. Inhibin pro-alphaC and inhibin B were detected in peripheral plasma, and testicular homogenate also contained large amounts of inhibin pro-alphaC and inhibin B. However, inhibin A was not detected either in peripheral plasma or in testicular homogenate. Plasma concentrations of inhibin pro-alphaC and inhibin B were significantly ($P < .001$) decreased 24 hours after orchidectomy. These results strongly suggest that the Leydig cells are the main source of dimeric inhibin B in the male golden hamster.

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